

1 No Amendments of the Claims are deemed requir d and no r quest to
amend the claims has been made.

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1 Another version of the rewritten paragraphs of the Specification that begin
on page 4, at line 4 and ending on line 20 are marked up to show all changes
relative to the previous version of the specification as required by Patent Rule
121 (c) (ii) separate from the amendment are as follows:

5 FIG. 2 is an enlarged scale, partial central sectional view of the
fastener shown in FIG. 1 in operative association with a portion of a wood
structural member and a portion of a sheet metal member. Portions of the
wood screw have been cut to indicate portions of the axial length of the
wood screw have been removed so that the wood screw may meet the
10 drawing paper restrictions. The upper portion of the wood screw is only
partially in cross section to clarify the details of the invention. In this view,
the pointed end portion 7 and substantially all of the threaded shank portion
8 has moved through the opening in the sheet metal member 5 and entered
the wood structural member 2. The knurled [section] portion 14 has not yet
15 entered the bore opening 3.

FIG. 3 is partial central sectional view of the wood screw shown in
FIGS. 1 and 2 in which the knurled portion 14 has just passed through the
opening in the sheet metal member 5 and has entered the wood structural
member 2. A portion of the knurled [means] portion 14 has been removed to
20 show how the portions between the knurls fill up with mashed wood fibers
from the wood structural member.

Another version of the rewritten paragraph of the Specification that begin on
page 6, at line 8 and ending on line 36 are marked up to show all changes
relative to the previous version of the specification as required by Patent Rule
25 121 (c) (ii) separate from the amendment are as follows:

Referring now in detail to the wood screw 1 of the present invention
as most clearly shown in FIGS. 1 and 2, the screw 1 includes; a shank 6
having an overall length 44 ; a pointed end portion 7 formed on an entering
extremity of the shank 6; the shank 6 having a threaded shank portion 8
30 having thread convolutions 9 with an outer diameter 10 greater than the
diameter of the first bore 3 and beginning at a first point 11 adjacent the
pointed end portion 7 and extending axially along the periphery of the shank
6 to a second point 12 and adapted to form and engage threads 13 in the
wood structural member 2; knurled [means] portion 14 formed in a portion
35 of the shank 6 having a first point 15 adjacent the second point 12 of the

- 1 threaded shank portion 8 and extending axially along the shank 6 to a
second point 16 and having an outside diameter 17 generally equal to the
outer diameter 10 of the thread convolutions 9 in the threaded shank portion
8 and having an inside diameter 18 (see FIG. 4) less than the outside
5 diameter 17 of the knurled [means] portion 14; the shank 6 having an
unthreaded shank portion 19 having a diameter 20 generally equal to the
outside diameter 17 of the knurled [means] portion 14 and having a first
point 21 adjacent the second point 16 of the knurled [means] portion 14 and
extending axially along the shank 6 and terminating at a second point 22;
10 the knurled [means] portion 14 being adapted for mashing over and radially
outwardly without severing a substantial proportion of the wood fibers of the
inner portions 23 of the threads 13 formed in the wood structural member 2
forming an annular zone 55 of mashed and severed, as well as unsevered
wood fibers having an outer diameter 56 greater than the diameter 20 of the
15 unthreaded shank portion 19 and forming a tight fit between the unthreaded
shank portion 19 and the annular zone 55 of mashed and severed, as well
as unsevered, wood fibers of the wood structural member 2; and a head 26
integrally connected to the shank 6 adjacent the second point 22 of the
unthreaded shank portion 19.
- 20 Another version of the rewritten paragraphs of the Specification that begin
on page 7, at line 21 and ending on line 28 are marked up to show all
changes relative to the previous version of the specification as required by
Patent Rule 121 (c) (ii) separate from the amendment are as follows:

Referring to FIG. 3, knurled [means] portion 14 may be double
25 knurled in a cross hatched pattern or have single straight knurls formed at an
angle to the axis of the screw. It has been found, however, that straight
knurls 30 (see FIG. 2) having a dull edge 47 and valleys 48 between the dull
edges 47 perform satisfactorily.

It has also been found that where the axial length 31 (see FIG. 1) of
30 the knurled [means] portion 14 is substantially less than the axial length 32
of the unthreaded shank portion 19 satisfactory results are obtained.

Another version of the rewritten paragraphs of the Specification that begin
on page 8, at line 25 and ending on page 9, line 19 are marked up to show
all changes relative to the previous version of the specification as required by
35 Patent Rule 121 (c) (ii) separate from the amendment are as follows:

1 Referring to FIG. 3, as the tapered entering portion 54 (see FIG. 3) of
 knurled [means] portion 14 of wood screw 1 reaches outer face 53 of wood
 structural member 2, the dull edges 47 of each knurl 30 engage inner
 portions 23 of threads 13. It is preferable to taper the entering portions 54
 5 of the knurled [means] portion 14 as shown in the drawings to lessen the
 shock as the knurls 30 strike the inner portions 23 of threads 13. Referring
 to FIG. 2, tapered entering portion 54 is bounded by lower bevel end 60 and
 upper bevel end 59. This is especially important since as previously stated
 edges 47 of the knurls 30 are dull and thus there is a greater resistance
 10 encountered by the wood screw 1 as it proceeds through the wood
 structural member 2.

The function of the dull edges 47 of knurls 30 is to bend the inner
 portions 23 of threads 13 in the structural wood member so as to mash
 rather than to sever a substantial portion of the wood fibers of the structural
 15 wood member. These bent over and mashed wood fibers as well as the
 severed wood fibers are illustrated in FIGS. 3 and 4 and are indicated
 generally by the number 55 which represents an annular zone of mashed and
 severed, as well as unsevered, wood fibers. The annular zone of mashed
 wood fibers 55, as seen when wood screw 1 is fully seated, is bounded by
 20 the space outboard of diameter 20 of unthreaded shank portion 19 and
 outer diameter 56 of the mashed fiber annular zone. Annular zone of
 mashed wood fibers 55 as seen in FIG. 4 extends from outer face 53 of
 wood structural member 2 to penetration point 61 (see FIG. 4) of upper
 bevel end 59 of knurled [means] portion 14 (see FIG. 2).

25 As the knurled [means] portion 14 proceeds into the wood structural
 member 2, the valleys 48 between the dull edge ridges 47 of knurls 30 fill
 with the unsevered fiber ends as well as severed wood fibers of the mashed
 over inner portions 23 of threads 13 and loose cuttings from the cutting
 edge 29 on the pointed end portion 7 of the wood screw 1. This filling of
 30 the valleys 48 in the knurls 30 further reduces the cutting or severing of the
 wood fibers as the knurl [means] portion 14 continues through the wood
 structural member 2.

Another version of the rewritten paragraph of the Specification that begin on
 page 9, at lin 35 and ending on pag 10, lin 3 are marked up to show all
 35 changes relative to the previous version of the specification as required by

1 Patent Rule 121 (c) (ii) separate from the amendment are as follows:

By sizing the knurled [means] portion 14 with an outside diameter 17 generally equal to the outer diameter 10 of the thread convolutions 9 in the threaded shank portion 8 and generally equal to the diameter 20 of the unthreaded shank portion 19, wood splitting as the unthreaded shank portion enters the wood structural member 2 is obviated.

Another version of the rewritten paragraph of the Specification that begin on page 10, at line 12 and ending on line 22 are marked up to show all changes relative to the previous version of the specification as required by

10 Patent Rule 121 (c) (ii) separate from the amendment are as follows:

Some typical dimensions of wood screws of the present invention having an overall shank length 44 measured from the underside 50 of washer 35 to the point 51 ranging from 1 1/2" to 3 1/2" are as follows: The length 33 of the threaded section 8 may vary from 7/8" to 3 1/4" while the axial length 31 of the knurled [section] portion 14 remains at a constant .250", and the length 32 of the unthreaded shank portion 19 varies with the length of the wood screw 1. For example, where the shank length is 1 1/2", the unthreaded shank portion 19 may be 5/8" whereas an overall shank length 44 of 3 1/2" may have an unthreaded shank length 19 of 1 1/4". Outer diameter 10 of thread convolutions 9 may have a diameter of 0.259 - 0.250" and an inner diameter of 0.187" to 0.183".

Another version of the rewritten paragraph of the Specification that begin on page 10, line 29 and ending on line 34 are marked up to show all changes relative to the previous version of the specification as required by

25 Patent Rule 121 (c) (ii) separate from the amendment are as follows:

Referring to FIGS. 7, 8, and 9, a truss 70 is illustrated having top chords 71 and 72, web members 76 and a bottom chord 73. To share loads, additional [trusses] trusses may be placed side by side and at least one of the chords of each adjacent truss should be wood and joined by screws 1. As illustrated, all of the chords 71 - 73 are wood and all of the multi-ply chords 71- 73 are joined by screws 1.

Another version of the rewritten paragraph of the Specification that begin on page 11, at line 35 and ending on line 35 are marked up to show all changes relative to the previous version of the specification as required by Patent Rule 121 () (ii) separate from the amendment are as follows:

- 1 [All plies of th truss lateral bracing should normally b connect d.]
Truss lateral bracing should normally be connected to each truss ply.

- 5 Another version of the rewritten paragraph of the Abstract of the Disclosure
that begin on page 19, at line 1 and ending on line 11 are marked up to
show all changes relative to the previous version of the specification as
required by Patent Rule 121 (c) (ii) separate from the amendment are as
follows:

10 **ABSTRACT OF THE DISCLOSURE**

- A wood screw for joining multi-ply wood structures in a shear
connection such as roof trusses and multiple plies of structural composite or
sawn lumber holding a wood structural member to another member such as a
sheet metal member a heavy metal member or another wood member
15 wherein the screw includes a shank having a threaded portion and an
unthreaded portion. A knurled [means] portion is provided on the shank
between the threaded and the unthreaded portion for forming an annular
zone of mashed and severed, as well as unsevered, wood fibers for
preventing wood splitting and laterally holding the screw to the wood
20 structural members in a tight fit.

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